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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/767,413	01/23/01	CASSEL	C 887

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EXAMINER

PHAM, T

ART UNIT	PAPER NUMBER
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2632

DATE MAILED: 03/20/01

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/767,413

Applicant(s)
Cassel et al.

Examiner
TOAN PHAM

Group Art Unit
2632



- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-11 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-11 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.84 (o) which requires legends on drawings:
--In Fig. 3, the generic blocks 61, 62, 63, 72, 73, 78, 82 and 84 should be provided with descriptive labels (e.g., On/Off Switch, Amplification Circuit, RF Transmitter, RF Receiver, etc).
Correction is required.

Specification

2. The disclosure is objected to because of the following informalities:
-- On page 6, item #22 in lines 6 and 14 represent two different parts (battery housing and lighting means)
-- On page 7, lines 10, 12 and 15, all items "18" should be changed to --19--.
Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Dwyer (5,928,157).

Regarding claim 1: O'Dwyer discloses a combination breathing monitor alarm and audio baby alarm comprising an attachable transmitter (105) forming a main body of a linearly elongated, pliable chest strap of formable material that is easily wrapable about the chest of an infant; and a receiver (111, 115, 119) housing receiver control circuitry for receiving signals transmitted by said transmitter (105) (col. 4, lines 6-23; col. 7, lines 42-55). O'Dwyer does not disclose the strap being soft; however, such material of the strap is merely a matter of design choice and substituting different material for another by one of ordinary skill in the art is anticipated and would not depart from the scope and spirit of the invention.

Regarding claim 2: O'Dwyer discloses the transmitter further comprises a hook (45) and loop fastener (43) means to allow for the chest strap to be connected in a manner circumscribing the wearer's chest (col. 7, lines 42-55; Figs. 2-9).

Regarding claim 4: O'Dwyer discloses the receiver (111, 115, 119) is in wireless radio communication with said transmitter (105) (col. 4, lines 19-23; Figs. 2-9).

5. Claims 3 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Dwyer (5,928,157) in view of Teodorescu et al. (6,011,477).

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Regarding claim 3: O'Dwyer does not disclose the sensors including a first and second resonant sensor and including a microphone housed with the chest strap. Teodorescu et al. discloses a respiration and movement monitoring system including a resonant sensor (50) and may be used interchangeably with first sensor (12) and second sensor (18) to monitored the respiration and movements of an infant (14) (col. 3, lines 55-61; col. 4, lines 34-54). Teodorescu et al. also discloses an audio detector unit (24) detects, filters, and amplifies audio signals produced proximal to support platform (16) by, for example, a voice or sounds associated with an infant (14) (col. 4, lines 8-11). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilized resonant sensors to monitored the respiration and movement activities of the infant as taught by Teodorescu et al. in a system disclosed by O'Dwyer for providing a fail-safe monitoring system that is responsive to the lack of resonant frequency being generated by the respiration movement of the infant or detachment of the straps from the infant.

Regarding claim 6: O'Dwyer discloses the transmitter unit (105) for communicating the alarm signal with the receiver (111, 115, 119). O'Dwyer does not disclose the antenna associated with the transmitter unit; however, transmitter and receiver including antennas for communication are well known in the art of wireless communication. Teodorescu et al. discloses the transmitter circuitry has a transmitter controller (26) communicating with an antenna and an audio detector unit (24) inherent of a microphone for communicating the alarm signal to the remote station (30).

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Regarding claim 7: O'Dwyer discloses the radio frequency receiver (111, 115, 119) communicating with the transmitter (105) for activating the alarm signal through the speaker (60) (col. 8, lines 31-14). O'Dwyer does not disclose the digital-to-analog speaker amplification circuit; however, it is well known that the transmitted signals are digital and it is being received as a digital signal until it is converted back to an analog signal and amplified and output to the speaker.

Regarding claim 8: O'Dwyer discloses the respiration monitor for monitoring the respiration of the user as well as interacting with the transmitter control for transmitting a respiration alarm signal (col. 4, lines 15-23).

Regarding claim 9: Teodorescu et al. discloses the respiration monitor includes a first (12) and second (14) sensor and a resonant sensor (50) may be used interchangeably with the first and second sensor to monitor the respiration and movement of the infant (col. 3, lines 55-61; col. 4, lines 34-54).

Regarding claim 10: O'Dwyer discloses the respiration monitor comprises a comparator (103) that compares the respiration related signal patterns to a stored pattern, and monitors the heart rate or pulse as compared with an initial baseline measurement (col. 4, lines 6-31).

Regarding claim 11: O'Dwyer discloses the respiration monitor comprises a comparator (103) circuit that determines if either of the measured characteristic falls below an alarm point, and generates an alarm output impulse that communicates with the radio frequency transmitter (105), forming a synthesized signal that communicating with an antenna as is well known in the

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art with wireless communication and results in an alarm of a predetermined frequency for audible transmission through the speaker (60) of the receiver (58, 111, 115, 119) (col. 4, lines 6-31).

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Dwyer (5,928,157) in view of Tao (4,862,144). O'Dwyer does not disclose a receiver comprises a light means. Tao discloses a receiver comprises a light means (42) for providing a visible alarm notification (col. 7, lines 34-36). Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilized a light means in the receiver as taught by Tao in a system as disclosed by O'Dwyer for providing a visible alarm indication and alerting the care taker of an alarm condition.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art references of Hochstein (4,433,693), Higgins et al. (5,479,932), Gavish (5,423,328), O'Dwyer (5,615,688), Sciarra (5,131,399), Beck (5,727,562), Sciarra et al. (4,494,553), and Dodakian (5,295,490) are cited to show a variety of respiration and motion monitoring system.

8. Any response to this action should be mailed to:

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Washington, D.C. 20231

or faxed to:

(703) 308-9051 or (703) 305-3988, (for formal communications intended for entry)

Or:

(703) 305-3988 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

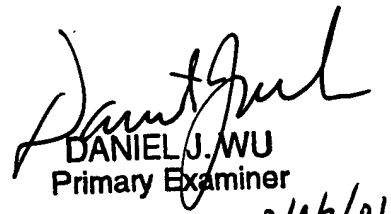
9. Any inquiry concerning this communication should be directed to Examiner Toan Pham at telephone number (703) 306-3038. The examiner can normally be reached on Monday-Friday, 7:00am-5:00pm.

If attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Jeffery Hofsass, can be reached on (703) 305-4717.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700, Mon-Fri, 8:30am-5:00pm.

Examiner: Toan Pham

Date: March 12, 2001


DANIEL J. WU
Primary Examiner
03/16/01